



# Eco-friendly ways to do more with less

**HIA GreenSmart Awards 2012**

**Category:** Framed Home  
**Company:** Phil Kelleher Homes  
**Location:** Dunsborough

■ **Kirsten Haydu**

An impressive list of environmentally savvy features in this Dunsborough bush dwelling demonstrates how well green principles work in a modern home.

Built by eco-housing specialist Phil Kelleher Homes, the residence showcases the newest innovations in green living, including a fascinating worm farm septic system.

The system's aerobic treatment unit creates a waste by-product which nourishes the rear lawn through an underground irrigation system.

A skillion roof is a feature of the passive-solar design which gives the exterior a contemporary profile while opening the rear to the north-facing aspect.

"The living areas will be really warm in winter with the sun streaming right through the lounge," builder Phil Kelleher said.

Overhanging eaves and a motorised solar pergola to the north-facing timber-decked veranda allow plenty of winter sunlight to warm the main

living areas while minimising exposure to summer rays.

A moisture sensor enhances the clever design of the louvred vergola, which triggers it to self-close when it rains.

An insulated subfloor provides noise reduction and maintains warmth to the timber-framed dwelling while double-course brick walls create a thermal mass.

Mr Kelleher ensured a low carbon footprint by sourcing building materials locally and supporting area businesses.

Recycled pavers create a footpath which leads to a stone-tiled and natural stone entrance which complements the landscape and earthy colours of the Hardie Scyon cladding.

Jarrah floorboards to the lounge are recycled from the floor joist of a 1940s home and natural granite stones are used for the wood-burning fireplace.

The solid Chazelles fire box is supported underneath by a mass of concrete.

The construction of the granite fireplace forms a natural stone feature wall to the adjacent main suite which has built-in vents to allow heat from



the fire to warm the room.

Designed to bring the outdoors in, one wall of the main bedroom is made up of stacking sliding glass doors, which open out to the veranda and provide views over a dam and bush reserve.

A stone and porcelain tiled ensuite is adorned by louvred windows for cross-ventilation.

Automatic underfloor heating and an avant-garde Kaldewei wall-mounted bath complete the luxurious ensuite.

There is a wall of stacking sliding doors on the north side of the open-plan kitchen and dining area. Grey stone and stainless-steel benchtops in the kitchen are complemented by aqua glass splashbacks.

Pendant lighting hangs from red cords and adds a pop of colour to the neutral interior.



A wine cellar flows from a hallway which joins the main living areas to the laundry. Special polycarbonate roofing with UV filter to the adjoining laundry deck allows clothes to dry outdoors in all weathers without fading.

A corridor off the entry leads to three bedrooms and the main bathroom and can be closed off by a cavity sliding door.

There is timber box shelving in the bathroom, which includes a walk-through stone-tiled shower with an energy-efficient rainwater showerhead.

The fourth bedroom is used as a study. It is an ideal winter room with north-facing corner louvre windows.

A heat pump hot-water system maximises energy efficiency and there are two 90,000-litre rainwater tanks.



The granite fireplace in the lounge is set in a natural stone wall and the fire also heats the adjacent bedroom.



The main bedroom veranda gives tranquil views of the bush.

